

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

ALCOA, INC.,

Plaintiff,

v.

ALCAN RHENALU,

Defendant.

C.A. No. 06-383-SLR

ANSWER, AFFIRMATIVE DEFENSES AND DEMAND FOR JURY TRIAL

Defendant Alcan Rhenalu hereby submits its Answer and Affirmative Defenses to the Complaint filed by Plaintiff Alcoa, Inc. ("Alcoa").

Nature of the Claim

1. This action arises out of the continuing effort of Pechiney, S.A. and Alcan, Inc. ("Alcan"), successor-in-interest to Pechiney, S.A. and its wholly owned subsidiary, Pechiney Rhenalu (collectively, "Pechiney"), to replicate patented aluminum alloy products that have achieved widespread commercial success for Alcoa. Less than four years ago, this Court rejected Pechiney's effort to declare invalid Alcoa's United States Patent No. 5,213,639 (the "639 patent"), and concluded that Pechiney had, in fact, infringed that patent with an aluminum alloy developed at its research facility in Voreppe, France and manufactured at its rolling mill; in Issoire, France. See Pechiney Rhenalu v. Alcoa, Inc., 224 F. Supp. 2d 773 (D. Del. 2002).

ANSWER: Alcan Rhenalu admits that in the decision reported at *Pechiney Rhenalu v. Alcoa, Inc.*, 224 F. Supp. 2d 773 (D. Del. 2002), the Court made certain findings of fact and conclusions of law, but Alcan Rhenalu denies that Alcoa has accurately described those findings of fact and conclusions of law in paragraph 1 of the Complaint. Alcan Rhenalu therefore denies these allegations and all the remaining allegations set forth in paragraph 1 of the Complaint.

2. Alcan, which acquired Pechiney in 2004, is now marketing another, substantially equivalent alloy developed by the same engineers and technicians, working at the same Voreppe research facility, and manufactured at the same Issoire rolling mill, and has indicated its intent to offer products incorporating that infringing alloy for imminent sale in the United States, as well

as to foreign manufacturers who are likely to import products containing the alloy into the United States, in violation of 35 U.S.C. §§ 271(a) and (b).

ANSWER: Alcan Rhenalu admits that Alcan Inc. acquired Pechiney S.A. in 2004, but denies the remaining allegations set forth in paragraph 2 of the Complaint.

3. Alcoa therefore seeks declaratory and injunctive relief enforcing its rights under the '639 patent.

ANSWER: Alcan Rhenalu admits that Alcoa purports to seek declaratory and injunctive relief enforcing its rights under the '639 patent but denies that it is entitled to any such relief.

Parties, Jurisdiction and Venue

4. Alcoa, Inc. is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania. Its principal place of business is located at 390 Park Avenue, New York, NY 10022-4608. Alcoa produces, among other things, aluminum and aluminum alloy products for aerospace applications, which it sells in the United States and throughout the world.

ANSWER: Alcan Rhenalu admits that Alcoa is a Pennsylvania corporation, and that Alcoa produces aluminum and aluminum alloy products for aerospace applications, which it sells in the United States and other countries. Alcan Rhenalu lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in paragraph 4 of the Complaint and therefore denies those allegations.

5. Alcan, Inc. is a Canadian corporation with its principal place of business at 1188 Sherbrooke Street West, Montreal, Quebec H3A 3G2. Alcan produces, among other things, aluminum and aluminum alloy products for aerospace applications, which it sells throughout the world.

ANSWER: Alcan Rhenalu admits that Alcan Inc. is a Canadian corporation with its principal place of business at 1188 Sherbrooke Street West, Montreal, Quebec H3A 3G2, and that Alcan Inc. produces aluminum and aluminum alloy products. Alcan Rhenalu lacks

knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in paragraph 5 of the Complaint and therefore denies those allegations.

6. Alcan derives substantial revenue from products or services consumed in the United States, including in the State of Delaware. Alcan engages in persistent corporate operations in the State of Delaware, including through numerous subsidiaries that are incorporated in the State.

ANSWER: Alcan Rhenalu admits that Alcan Inc. derives revenue from products consumed in the United States, but denies that Alcan Inc. derives any revenue from products consumed in Delaware, and denies all the remaining allegations set forth in paragraph 6 of the Complaint.

7. Alcan operates in the United States and around the world through a complicated web of interlocking corporations, described below.

ANSWER: Alcan Rhenalu denies the allegations set forth in paragraph 7 of the Complaint.

8. Alcan purports to do business in the United States entirely through a wholly owned subsidiary, Alcan Corp., which is incorporated in the State of Texas and has its principal place of business at 6060 Parkland Boulevard, Mayfield Heights, OH 44124.

ANSWER: Alcan Rhenalu admits that Alcan Corporation is a wholly owned subsidiary of Alcan Inc., and that it is incorporated in Texas. Alcan Rhenalu denies the remaining allegations set forth in paragraph 8 of the Complaint.

9. Among Alcan's Delaware subsidiaries is a company, also called Alcan Corp., that has its principal place of business at 8770 West Bryn Mawr, Chicago, IL 60651.

ANSWER: Alcan Rhenalu admits that among Alcan Inc.'s Delaware subsidiaries is a company called Alcan Corporation, and that Alcan Corporation's address is 8770 West Bryn Mawr Avenue, Chicago, Illinois, 60651. Alcan Rhenalu denies the remaining allegations set forth in paragraph 9 of the Complaint.

10. Alcan Corp. of Texas does business through numerous wholly owned subsidiaries, many of which, in turn, do business through other subsidiaries. Alcan Corp.'s subsidiaries include Alcan Pechiney Corp., which does business through a subsidiary, Pechiney Metals LLC, which does business through another subsidiary, Alcan Rolled Products - Ravenswood LLC.

ANSWER: Alcan Rhenalu admits that the subsidiaries of Alcan Corporation, a subsidiary incorporated in Texas, include Pechiney Metals LLC and Alcan Rolled Products - Ravenswood LLC, but denies that the subsidiaries of Alcan Corporation include Alcan Pechiney Corporation. Alcan Rhenalu denies the remaining allegations set forth in paragraph 10 of the Complaint.

11. Alcan Pechiney Corp., a wholly owned subsidiary of Alcan Corp., is a Texas corporation with its principal place of business at 6060 Parkland Boulevard, Mayfield Heights, OH 44124.

ANSWER: Alcan Rhenalu denies the allegations set forth in paragraph 11 of the Complaint.

12. Pechiney Metals LLC, a wholly owned subsidiary of Alcan Pechiney Corp., is a Delaware limited liability company. Pechiney Metals LLC is a successor-in-interest to Pechiney Metals Corp., which was a subsidiary of Pechiney prior to Alcan's acquisition of Pechiney.

ANSWER: Alcan Rhenalu admits that Pechiney Metals LLC is a Delaware limited liability company, and that Pechiney Metals Corporation was a subsidiary of Pechiney S.A. prior to Alcan Inc.'s acquisition of Pechiney S.A. Further answering, Alcan Rhenalu states that Pechiney Metals LLC was formed pursuant to a simultaneous filing of a certificate of conversion and a certificate of formation which filings converted the form of Pechiney Metals Corporation to a limited liability corporation and formed a new limited liability company, named Pechiney Metals LLC. Alcan Rhenalu denies the remaining allegations set forth in paragraph 12 of the Complaint.

13. Alcan Rolled Products - Ravenswood, LLC ("Alcan Rolled Products"), a wholly owned subsidiary of Pechiney Metals LLC, is a Delaware limited liability company that operates

the former Pechiney rolling mill in Ravenswood, West Virginia. Alcan Rolled Products is a successor-in-interest to Pechiney Rolled Products, LLC, which was a subsidiary of Pechiney Metals Corp. prior to Alcan's acquisition of Pechiney. The Ravenswood facility, which produces aluminum and aluminum alloy products for the aerospace industry, is one of the largest aluminum rolling mills in the world. The facility is capable of manufacturing fuselage sheets and other products incorporating Alcan's latest infringing alloy for sale in the United States and around the world.

ANSWER: Alcan Rhenalu admits that Alcan Rolled Products - Ravenswood, LLC ("Alcan Rolled Products"), is a Delaware limited liability company, and that it is a wholly owned subsidiary of Pechiney Metals LLC. Alcan Rhenalu further admits that Alcan Rolled Products operates the former Pechiney rolling mill in Ravenswood, West Virginia. Additionally, Alcan Rhenalu admits that Pechiney Rolled Products, LLC was a subsidiary of Pechiney Metals Corporation at the time of Alcan Inc.'s acquisition of Pechiney S.A. Further answering, Alcan Rhenalu admits that the Ravenswood facility operated by Alcan Rolled Products produces aluminum and aluminum alloy products for the aerospace industry and that the facility is a large aluminum rolling mill. Alcan Rhenalu denies the remaining allegations set forth in paragraph 13 of the Complaint.

14. In December 2003, Alcan acquired a controlling stake in Pechiney, a French société anonyme that has its principal place of business at 7 place du Chancelier Adenauer, 75218 Paris Cedex 16, France. In February 2004, Pechiney, which produces aluminum and aluminum alloy products, became a wholly owned subsidiary of Alcan.

ANSWER: Alcan Rhenalu admits that in December 2003, Alcan Inc. acquired a controlling stake in Pechiney S.A., and that, at that time, Pechiney S.A. was a French société anonyme that had its principal place of business at 7 place du Chancelier Adenauer, 75218 Paris Cedex 16, France. Alcan Rhenalu further admits that in February 2004, Pechiney S.A. became a wholly owned subsidiary of Alcan Inc. and that at that time Pechiney S.A. produced aluminum and aluminum alloy products. Alcan Rhenalu denies the remaining allegations set forth in paragraph 14 of the Complaint.

15. Alcan Rhenalu is a wholly owned subsidiary of Pechiney, S.A. that produces aluminum and aluminum alloy products for aerospace applications. Alcan Rhenalu, successor-in-interest to Pechiney Rhenalu, is a French corporation, with its principal place of business at 7 place du Chancelier Adenauer, 75218 Paris Cedex 16, France.

ANSWER: Alcan Rhenalu admits that it produces aluminum and aluminum alloy products for aerospace applications, and that its principal place of business is 7 place du Chancelier Adenauer, 75218 Paris Cedex 16, France. Alcan Rhenalu denies the remaining allegations set forth in paragraph 15 of the Complaint.

16. Alcan's Engineered Products division, which includes its aerospace business, is now headquartered at Pechiney's principal place of business, at 7 place du Chancelier Adenauer, 75218 Paris Cedex 16, France. The division's research facilities include the facility in Voreppe, France where Pechiney's prior infringing alloy was developed. Its production facilities include the rolling mill in Issoire, France where that infringing alloy was produced.

ANSWER: Alcan Rhenalu admits that Alcan Inc.'s Engineered Products division includes its aerospace business, and that its Engineered Products division is headquartered at 7 place du Chancelier Adenauer, 75218 Paris Cedex 16, France. Further answering, Alcan Rhenalu admits that the Engineered Products division's research facilities include a facility in Voreppe, France where Pechiney's 2024A alloy was developed, and that its production facilities include a rolling mill in Issoire, France where 2024A alloy was produced. Alcan Rhenalu denies the remaining allegations set forth in paragraph 16 of the Complaint.

17. Alcan's latest infringing alloy was developed at the Voreppe facility by the same engineers and technicians who developed Pechiney's prior infringing alloy. The infringing Alcan alloy is being produced at the same rolling mill in Issoire, France, where the infringing Pechiney alloy was manufactured.

ANSWER: Alcan Rhenalu denies the allegations set forth in paragraph 17 of the Complaint.

18. The Court has subject matter jurisdiction over the claims averred herein pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201 and 2202. Venue in this District is proper pursuant to 28 U.S.C. §§ 1391 and 1400.

ANSWER: Alcan Rhenalu admits that Alcoa is contending that jurisdiction is proper pursuant to 28 U.S.C. §§ 1331, 1338(a), 2201, and 2202 and that venue is proper under 28 U.S.C. §§ 1391 and 1400. Alcan Rhenalu denies the remaining allegations of paragraph 18 of the Complaint.

19. Pechiney previously submitted to the jurisdiction of this Court with regard to this subject matter by seeking a declaration that its substantially equivalent prior alloy did not infringe the claims of the '639 patent, and that that patent was invalid. Alcan is subject to the jurisdiction of this Court as Pechiney's successor-in-interest, as well as by virtue of the business Alcan does in the State of Delaware.

ANSWER: Alcan Rhenalu admits that Pechiney Rhenalu submitted to the jurisdiction of this Court with regard to the '639 patent in the previous litigation. Alcan Rhenalu denies the remaining allegations set forth in paragraph 19 of the Complaint.

20. Each of the Alcan subsidiaries described above is complicit in the infringing conduct complained of here.

ANSWER: Alcan Rhenalu denies the allegations set forth in paragraph 20 of the Complaint.

The '639 Patent and Pechiney's Prior Infringement

21. On May 25, 1993, the United States Patent & Trademark Office issued the '639 patent, entitled "Damage Tolerant Aluminum Alloy Products Useful for Aircraft Applications Such as Skin", which is assigned to Alcoa. A copy of the '639 patent is attached as Exhibit A.

ANSWER: Alcan Rhenalu admits that on May 25, 1993, the United States Patent & Trademark Office issued the '639 patent, entitled "Damage Tolerant Aluminum Alloy Products Useful for Aircraft Applications Such as Skin" and that Alcoa appears as the Assignee on the face of the patent. Alcan Rhenalu further admits that a copy of the '639 patent was attached to the Complaint as Exhibit A. Alcan Rhenalu denies the remaining allegations set forth in paragraph 21 of the Complaint.

22. The '639 patent discloses and claims certain aluminum alloy products, and methods for producing them, that are particularly useful in the construction of commercial aircraft fuselages. Relative to products made with conventional aluminum alloys that have been in use since the 1950s, the products feature improved "fracture toughness" – the ability to resist the catastrophic advance of a crack – and "fatigue crack growth resistance" – the ability to resist the slow advance of a pre-existing crack through cycles of stressing and relaxing. At the same time, the products exhibit good strength and corrosion resistance. The benefits of this invention include longer aircraft life and improved safety. In addition, by reducing or eliminating the need for so-called "crack-stoppers" – metal strips attached inside the fuselage skin to retard the growth of cracks – the products' greater damage tolerance permits the construction of more fuel efficient aircraft.

ANSWER: Alcan Rhenalu admits that the '639 patent discloses and claims certain aluminum alloy products, and methods for producing them, and discloses that such alloys may be used in the construction of aircraft fuselages. Alcan Rhenalu further admits that the '639 patent states that the claimed products feature improved "fracture toughness" and "fatigue crack growth resistance." Alcan Rhenalu denies the remaining allegations set forth in paragraph 22 of the Complaint.

23. In January 1996, the Aluminum Association, based in Washington, D.C., granted Alcoa's request for the International Alloy Designation "2524." This numerical designation, which indicates the allowable range of composition for the alloy under the Association's rules, is the name by which Alcoa has referred to certain products covered by the '639 patent.

ANSWER: Alcan Rhenalu admits that in January of 1996, the Aluminum Association, which has offices in Washington D.C., granted Alcoa's request for the International Alloy Designation "2524." Alcan Rhenalu further admits that the numerical designation, 2524, indicates the allowable range of composition for the alloy under the Aluminum Association's rules, and that Alcoa has used the designation for certain of its products. Alcan Rhenalu denies the remaining allegations set forth in paragraph 23 of the Complaint.

24. The 2524 alloy has proved popular among aircraft manufacturers, including the two largest such manufacturers, the Boeing Co. ("Boeing") and the European Airbus consortium ("Airbus"). For example, Boeing uses 2524 for the fuselage skin of its 777-series aircraft and Airbus uses it on its A340-500 and A340-600 jets. The alloy is also used in aircraft

manufactured by Canada's Bombardier, Inc. ("Bombardier") and Brazil's Embraer, S.A. ("Embraer").

ANSWER: Alcan Rhenalu lacks knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 24 of the Complaint at this time and therefore denies those allegations.

25. Recognizing that its lack of a comparable alloy placed it at a serious competitive disadvantage, Pechiney sought to replicate Alcoa's invention. The initial result of that effort was an alloy developed at Pechiney's research facility in Voreppe, France and produced at Pechiney's manufacturing facility in Issoire, France that received the designation "2024A" from the Aluminum Association.

ANSWER: Alcan Rhenalu admits that an alloy was developed at the research facility in Voreppe, France and produced in Issoire, France that received the designation "2024A" from the Aluminum Association. Alcan Rhenalu denies the remaining allegations set forth in paragraph 25 of the Complaint.

26. In 1997, Pechiney began marketing 2024A to aircraft manufacturers.

ANSWER: Alcan Rhenalu admits that in 1997, Pechiney Rhenalu responded to the European consortium Airbus' request that Pechiney Rhenalu develop an aluminum alloy to compete with Alcoa's 2524 alloy by providing Airbus with a Qualification Report on two 2024A products. Further answering, Alcan Rhenalu admits that in 1997, Pechiney Rhenalu responded to a request from Boeing to submit proposed pricing for various aluminum products by submitting a proposal to Boeing for the sale of the 2024A alloy. Alcan Rhenalu denies the remaining allegations set forth in paragraph 26 of the Complaint.

27. Aware that 2024A was, in fact, little more than a copy of 2524, Pechiney – through Pechiney Rhenalu – filed a declaratory judgment action against Alcoa in this Court in May 1999. The lawsuit sought a declaration that the '639 patent was invalid, and that 2024A did not infringe that patent.

ANSWER: Alcan Rhenalu admits that Pechiney Rhenalu filed a declaratory judgment action against Alcoa in this Court in May of 1999 and sought a declaration that the '639 patent was invalid, and that 2024A did not infringe the patent. Alcan Rhenalu denies the remaining allegations set forth in paragraph 27 of the Complaint.

28. Following a ten-day trial in January 2001, a jury, and then the Court (in a September 2002 opinion), rejected all of Pechiney's claims. See Pechiney Rhenalu v. Alcoa, Inc., 224 F. Supp. 2d 773 (D. Del. 2002). In a 34-page opinion, Chief Judge Robinson concluded that "Alcoa ha[d] demonstrated by a preponderance of the evidence that 2024A infringe[d] the asserted claims of the '639 patent", and that the '639 patent was both valid and enforceable. Id. at 799, 806.

ANSWER: Alcan Rhenalu admits that there was a trial from January 8 to January 18, 2001, and that a jury, and then the Court, rejected Pechiney's claims. Alcan Rhenalu admits that Chief Judge Robinson wrote that "Alcoa ha[d] demonstrated by a preponderance of the evidence that 2024A infringe[d] the asserted claims of the '639 patent," and concluded in that case that the '639 patent was both valid and enforceable in a 34-page opinion. Alcan Rhenalu denies the remaining allegations set forth in paragraph 28 of the Complaint.

29. Pechiney did not appeal that judgment, which has full collateral estoppel and res judicata effect.

ANSWER: Alcan Rhenalu admits that Pechiney did not appeal that judgment, but denies the remaining allegations set forth in paragraph 29 of the Complaint.

Pechiney's Second Attempt to Replicate the 2524 Alloy

30. Although Pechiney purported to accept the district court's judgment, it was secretly pursuing an alternative means of replicating Alcoa's 2524 alloy, in willful violation of the '639 patent.

ANSWER: Alcan Rhenalu denies the allegations set forth in paragraph 30 of the Complaint.

31. On or about February 18, 2003, Pechiney's second substitute alloy received the designation "2056" from the Aluminum Association. As part of its application for that designation, Pechiney represented to the Aluminum Association that it had both offered the alloy for sale and supplied it "in commercial quantities" within the preceding twelve months.

ANSWER: Alcan Rhenalu admits that a new alloy it has developed has received the "2056" designation from the Aluminum Association. Alcan Rhenalu further admits that before the alloy received this designation, a representation was made to the Aluminum Association that the alloy had been offered for sale and supplied in commercial quantities in the previous 12 months. Further answering, Alcan Rhenalu states that no representation was made to the Aluminum Association that the alloy had been offered for sale or supplied in the United States. Alcan Rhenalu denies the remaining allegations set forth in paragraph 31 of the Complaint.

32. Pechiney's 2056 alloy is nothing more than another copy of 2524. The alloy was developed at the very same facility in Voreppe, France where Pechiney previously developed 2024A, and produced at the very same plant in Issoire, France at which Pechiney previously produced that infringing alloy. Like 2024A, 2056 contains all the essential elements of 2524. The composition of the 2056 alloy is within claims disclosed by Alcoa's '639 patent. The properties of the alloy similarly fall within claims disclosed by the '639 patent.

ANSWER: Alcan Rhenalu admits that the 2056 alloy was developed in Voreppe, France and that the alloy has been produced at a plant in Issoire, France. Alcan Rhenalu denies the remaining allegations set forth in paragraph 32 of the Complaint.

33. On July 7, 2003, Pechiney sought to obtain a U.S. patent for 2056 by submitting an application to the United States Patent and Trademark Office on behalf of its employees, Timothy Warner, Ronan Dif, Bernard Bes and Hervé Ribes. Those individuals were previously involved in the design, testing and manufacture of 2024A. Each of them provided deposition testimony in Pechiney's infringement action against Alcoa, and the testimony of Messrs. Warner, Bes and Ribes was introduced at trial in that action.

ANSWER: Alcan Rhenalu admits that on July 7, 2003, Application Serial No. 10/612,878 was submitted to the United States Patent and Trademark Office naming as the inventors Timothy Warner, Ronan Dif, Bernard Bes and Hervé Ribes; that application is assigned to Alcan Rhenalu. Alcan Rhenalu further admits that the named inventors were

involved in the design, testing and manufacture of the 2024A, that they were deposed in the prior action involving Alcoa, and that the testimony of Messrs. Warner, Bes and Ribes was introduced at trial in that action. Alcan Rhenalu denies the remaining allegations set forth in paragraph 33 of the Complaint.

34. The patent application, titled "Aircraft Structural Member Made of an Al-Cu-Mg Alloy", describes the purported invention as "an AlCuMg alloy with an improved damage tolerance, at least an equivalent mechanical strength, and improved resistance to corrosion in comparison with the prior art", to be used "as aircraft fuselage skin". The application is currently pending.

ANSWER: Alcan Rhenalu admits that the patent application, titled "Aircraft Structural Member Made of an Al-Cu-Mg Alloy," states that "A purpose of this invention was to obtain aircraft structural members, and particularly fuselage members comprising an AlCuMg alloy with an improved damage tolerance, at least an equivalent mechanical strength, and improved resistance to corrosion in comparison with the prior art, without the need to add expensive elements that are problematic for recycling." Alcan Rhenalu further admits that the Abstract of the patent application states that "This clad metal plate type product is a suitable element to be used as aircraft fuselage skin," and that the application is currently pending. Alcan Rhenalu denies the remaining allegations set forth in paragraph 34 of the Complaint.

35. That same month, Alcan announced a tender offer to acquire Pechiney. Following the approval of Pechiney's board, Alcan acquired control of Pechiney in December 2003. In February, 2004, Alcan acquired the remaining shares of Pechiney that it did not own, and Pechiney became a wholly owned subsidiary of Alcan.

ANSWER: Alcan Rhenalu admits that in July of 2003, the month the referenced United States patent application was filed, Alcan Inc. announced a tender offer to acquire Pechiney S.A. Alcan Rhenalu further admits that in December of 2003, Alcan Inc. acquired a majority of the shares of Pechiney S.A., that in February of 2004 Alcan Inc. acquired the remaining shares it did not already own, and that Pechiney S.A. then became a wholly owned

subsidiary of Alcan Inc. Alcan Rhenalu denies the remaining allegations set forth in paragraph 35 of the Complaint.

Alcan's Preparations to Offer 2056 for Imminent Sale in the United States

36. Since the acquisition, and in spite of the fact that Alcan knows that 2056 infringes Alcoa's '639 patent, Alcan has actively marketed 2056 in direct competition with Alcoa's 2524 alloy on the internet, at industry conferences and in face-to-face meetings.

ANSWER: Alcan Rhenalu denies the allegations set forth in paragraph 36 of the Complaint.

37. In or about April 2004, Alcan agents met in Paris with representatives of China's First Aircraft Institute ("FAI"), which develops large commercial aircraft. The Alcan agents proposed that FAI replace 2524 with 2056 in China's Advanced Regional Jet program.

ANSWER: Alcan Rhenalu lacks knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 37 of the Complaint with regard to agents of Alcan Inc. and Pechiney S.A. (the term "Alcan" is defined in the Complaint to mean Pechiney S.A. and Alcan, Inc. (Complaint ¶ 1)), and therefore denies those allegations. To the extent that Alcoa nevertheless intends the allegations of paragraph 37 of the Complaint to extend to Alcan Rhenalu, Alcan Rhenalu admits that its agents met with representatives of FAI to discuss the possible use of 2056 in aircraft under development by FAI. Alcan Rhenalu denies the remaining allegations set forth in paragraph 37 of the Complaint.

38. At or about the same time, Alcan agents met with representatives of DaimlerChrysler Aerospace Airbus GmbH, the German member of the Airbus consortium, and with representatives of Embraer, to offer 2056 for use in aircraft under development at those companies.

ANSWER: Alcan Rhenalu lacks knowledge or information sufficient to form a belief as to the truth of the allegations set forth in paragraph 38 of the Complaint with regard to agents of Alcan Inc. and Pechiney S.A. (the term "Alcan" is defined in the Complaint to mean Pechiney S.A. and Alcan, Inc. (Complaint ¶ 1)), and therefore denies those allegations. To the extent that

Alcoa nevertheless intends the allegations of paragraph 38 of the Complaint to extend to Alcan Rhenalu, Alcan Rhenalu admits that its agents met with representatives of DaimlerChrysler Aerospace Airbus GmbH, the German member of the Airbus consortium, and with representatives of the Brazilian company, Embraer, to discuss the possible use of 2056 in aircraft under development by those companies. Alcan Rhenalu denies the remaining allegations set forth in paragraph 39 of the Complaint.

39. On June 8, 2004, Alcan agents Warner and Bes delivered a presentation at the AeroMat 2004 conference in Seattle titled "Development of High Strength Fuselage Sheet", in which they explicitly compared 2056 with 2524. In another presentation at the same conference titled "Advanced Metallic Solutions for Fuselage Skins", Warner, Bes and Ribes, together with Alcan agent Sjoerd van der Veen, described 2056 as an "Alcan offer" and as "[i]ndustrially ready", with a "[f]ull data package available".

ANSWER: Alcan Rhenalu admits that on June 8, 2004, a presentation was given by Sjoerd van der Veen entitled, "Advanced Metallic Solutions for Fuselage Skins" at AeroMat 2004, a technical conference held in Seattle for the aerospace industry. Alcan Rhenalu further admits that this presentation included a chart describing the main technical characteristics of the "Alcan offer," and that it was "industrially ready," with a "fully data package available," but the presentation also stated, immediately thereafter, that other technical matters were not yet completed: "AMS draft spec submitted" and "AA registration under way." Alcan Rhenalu denies the remaining allegations set forth in paragraph 39 of the Complaint.

40. On November 18, 2004, Alcoa's outside patent counsel wrote a letter to Alcan Corp.'s Vice President and General Counsel, William H. Jarriels, at 6060 Parkland Boulevard, Mayfield Heights, OH 44124. The caption of the letter referenced both the 2056 alloy and Alcoa's '639 patent – the very same patent over which Alcoa previously litigated against Pechiney, Alcan's predecessor-in-interest.

ANSWER: Alcan Rhenalu admits that on November 18, 2004, Alcoa's outside patent counsel wrote a letter to Alcan Corp.'s Vice President and General Counsel, William H. Jarriels, at 6060 Parkland Boulevard, Mayfield Heights, OH 44124. Alcan Rhenalu further admits that

the caption of the letter referenced the 2056 alloy and Alcoa's '639 patent, and that the '639 patent was also the subject of the litigation between Alcoa and Pechiney Rhenalu. Alcan Rhenalu denies the remaining allegations set forth in paragraph 40 of the Complaint.

41. In the letter, Alcoa's counsel asked Mr. Jarriels to "[p]lease advise us of Alcan's intentions regarding the above captioned alloy".

ANSWER: Alcan Rhenalu admits the allegations set forth in paragraph 41 of the Complaint.

42. On January 20, 2005, Alcoa's counsel received a written response from Eileen Burns Lerum, Vice President and Senior Litigation Counsel with Pechiney Plastic Packaging, Inc. Ms. Lerum was a member of Pechiney's legal department during the prior litigation against Alcoa concerning the '639 patent.

ANSWER: Alcan Rhenalu admits that on January 20, 2005, Eileen Burns Lerum, Vice President and Senior Litigation Counsel with Pechiney Plastic Packaging, Inc., sent Alcoa's counsel a response to his November 18, 2004, letter, and that Ms. Lerum was a member of Pechiney's legal department during the prior litigation with Alcoa concerning the '639 patent. Alcan Rhenalu lacks knowledge or information sufficient to form a belief as to the truth of the remaining allegations set forth in paragraph 42 of the Complaint and therefore denies those allegations.

43. Ms. Lerum wrote on stationery bearing Alcan's name and corporate logo. Her mailing address – 8770 West Bryn Mawr Avenue, Chicago, IL 60631 – is the address of the principal place of business of Alcan Corp., of Delaware.

ANSWER: Alcan Rhenalu admits that Ms. Lerum wrote the January 20, 2005, letter referenced in paragraph 42 of the Complaint on stationary bearing the name "Alcan" and the Alcan logo, and that her mailing address – 8770 West Bryn Mawr Avenue, Chicago, IL 60631 – is the address of Alcan Corporation of Delaware. Alcan Rhenalu denies the remaining allegations set forth in paragraph 43 of the Complaint.

44. Ms. Lerum indicated that “Mr. Jarriels is no longer with the Alcan organization”, but that she would be “looking into this issue” in his stead.

ANSWER: Alcan Rhenalu admits the allegations set forth in paragraph 44 of the Complaint.

45. On March 17, 2005, Ms. Lerum informed Alcoa’s counsel in writing that “Alcan intends to offer” 2056 products for sale.

ANSWER: Alcan Rhenalu admits that on March 17, 2005, Ms. Lerum informed Alcoa’s counsel in writing that “Alcan intends to offer 2056 T3 Alclad sheets and light gauge plate,” but denies that she ever informed him that Alcan intended to offer any 2056 alloy products for sale in the United States. Alcan Rhenalu denies the remaining allegations set forth in paragraph 45 of the Complaint.

46. Alcan has recently started to feature 2056 prominently on its corporate website as one of its “new alloys/solutions . . . for fuselage panels with high damage tolerances”. A brochure available under a section of the website labeled “Global Offer” now describes 2056 as “particularly recommended for fuselage application”, and indicates that the alloy can be “delivered in O or T3 temper depending on customer requirements”. The brochure notes, under the heading “Availability”, that “2056 clad fuselage sheets are available in the thickness range from 1,6 mm up to 8 mm”. Another brochure on the Alcan website notes: “Alcan, through its Isoire plant, produces a whole range of alloys and temper qualities for specific applications. Standard alloys – meeting AMS-QQA or EN specifications – plus the newly developed sheet alloys – e.g. 2056, 6056, 6156 and 2024-HF – are available.”

ANSWER: Alcan Rhenalu admits that links from the website of Alcan Aerospace, Transportation and Industry, which lists its address in Paris, France, have stated that 2056 is one of its “new alloys/solutions . . . for fuselage panels with high damage tolerances.” Alcan Rhenalu also admits that a brochure under a section of this website labeled “Global Offer” has described 2056 as “particularly recommended for fuselage application,” and has indicated that it can be “delivered in O or T3 temper depending on customer requirements.” Further answering, Alcan Rhenalu admits that this brochure has noted, under the heading “Availability,” that “2056 clad fuselage sheets are available in the thickness range from 1,6 mm up to 8 mm.” Alcan

Rhenalu also admits that another brochure accessible on this website has noted that “Alcan, through its Issoire plant, produces a whole range of alloys and temper qualities for specific applications. Standard alloys – meeting AMS-QQA or EN specifications – plus the newly developed sheet alloys – e.g. 2056, 6056, 6156 and 2024-HF – are available.” Alcan Rhenalu denies the remaining allegations set forth in paragraph 46 of the Complaint.

47. Both Airbus and Embraer have recently conducted tests on 2056 and are close to qualifying it for use as a replacement for 2524, if they have not done so already. Both companies derive substantial revenues from aircraft sales in the United States.

ANSWER: Alcan Rhenalu admits that Airbus and Embraer have conducted tests on the 2056 alloy. Alcan Rhenalu lacks knowledge or information sufficient to form a belief as to the truth of the allegations set forth in second sentence of paragraph 47 of the Complaint and therefore denies those allegations.

48. On June 12, 2006, Alcoa’s attorneys wrote a letter to Alcan, Inc.’s Executive Vice President and Chief Legal Officer, David L. McAusland, advising him of Alcoa’s conclusion that Alcan’s activities pose an imminent threat of infringing the ‘639 patent, and stating Alcoa’s intentions to protect its rights under the patent.

ANSWER: Alcan Rhenalu admits the allegations set forth in paragraph 48 of the Complaint.

49. By virtue of the foregoing, including Pechiney’s prior infringement of Alcoa’s ‘639 patent, there is a substantial and continuing justiciable controversy between Alcoa and Alcan as to whether Alcan’s imminent plans to offer 2056 for sale in the United States, or to foreign manufacturers who are likely to import products containing the alloy into the United States, will infringe the ‘639 patent. Alcan’s actions have created a reasonable apprehension in Alcoa of imminent harm and loss resulting from Alcan’s threatened infringement of the ‘639 patent. Such infringement will cause Alcoa great and irreparable injury.

ANSWER: Alcan Rhenalu denies the allegations set forth in paragraph 49 of the Complaint.

COUNT ONE

(Infringement)

50. Alcoa repeats and reavers each of the averments of ¶¶ 1 through 49.

ANSWER: Alcan Rhenalu repeats and reavers its answers to each of the averments of paragraphs 1 through 49.

51. Defendants have made meaningful preparations and taken concrete steps to offer for sale within the United States aluminum alloy products, including at least Alcan's 2056 products, that infringe Alcoa's United States Patent No. 5,213,639, either literally or under the doctrine of equivalents, in violation of 35 U.S.C. § 271(a).

ANSWER: Alcan Rhenalu denies the allegations set forth in paragraph 51 of the Complaint.

COUNT TWO

(Active Inducement)

52. Alcoa repeats and reavers each of the averments of ¶¶ 1 through 51.

ANSWER: Alcan Rhenalu repeats and reavers its answers to each of the averments of paragraphs 1 through 51.

53. Defendants have made meaningful preparations and taken concrete steps to offer for sale to foreign aircraft manufacturers aluminum alloy products, including at least Alcan's 2056 products, that infringe Alcoa's United States Patent No. 5,213,639, either literally or under the doctrine of equivalents, with knowledge that those products are likely to be used in aircraft sold in the United States, in violation of 35 U.S.C. § 271(b).

ANSWER: Alcan Rhenalu denies the allegations set fourth in paragraph 53 of the Complaint.

AFFIRMATIVE DEFENSES

Alcan Rhenalu asserts the following affirmative defenses:

First Affirmative Defense
(No Direct Infringement)

As a first and separate affirmative defense, Alcan Rhenalu has not infringed and is not infringing any valid and enforceable claim of the '639 patent.

Second Affirmative Defense
(No Induced Infringement)

As a second and separate affirmative defense, Alcan Rhenalu has not induced and is not inducing the infringement of any valid and enforceable claim of the '639 patent.

Third Affirmative Defense
(Estoppel)

As a third and separate affirmative defense, upon information and belief, and by reason of the proceedings in the United States Patent and Trademark Office during the prosecution of the application that resulted in the '639 patent, as shown by its file history, and by reason of the amendment, cancellation or abandonment of claims, and the admissions and other statements made therein by or on behalf of the patentee, and by reason of statements made, and positions taken, by Alcoa in *Pechiney Rhenalu v. Alcoa, Inc.*, No. C.A. No. 99-301-SLR, Alcoa is estopped from claiming in this case a construction of the '639 patent that would cause any valid or enforceable claim thereof to cover or include, literally or under the doctrine of equivalents, the 2056 alloy.

Fourth Affirmative Defense
(35 U.S.C. § 101 et seq.)

As a fourth and separate affirmative defense, upon information and belief, the claims of the '639 patent are invalid because they fail to meet one or more of the conditions for patentability set forth at 35 U.S.C. §§ 101 et seq., to the extent that Alcoa has now taken the position that the Court's prior claim construction ruling in *Pechiney Rhenalu v. Alcoa, Inc.*, No.

C.A. No. 99-301-SLR, which was limited to different claim terms not at issue here, and did not address the prior art in connection with the claims that must now be construed, is nonetheless a complete and binding determination of claim construction for this case.

Fifth Affirmative Defense
(Patent Misuse)

As a fifth and separate affirmative defense, upon information and belief, Alcoa's claims are barred by the doctrine of patent misuse because Alcoa has, through this litigation and related means, attempted to 1) enforce the '639 patent outside the territorial reaches of the United States by filing suit without evidence of any actual or imminent infringement within the United States; 2) enforce the '639 patent to prevent sales outside the United States to manufacturers whose aircraft will be in the United States temporarily, in violation of 35 U.S.C. § 272, which provides an exemption from patent infringement liability for inventions used on aircraft temporarily in the United States; and 3) enforce the '639 patent beyond its expiration date by preventing Alcan Rhenalu from negotiating contracts for the shipment of the 2056 alloy after the expiration of the '639 patent.

Sixth Affirmative Defense
(Failure to State a Claim)

As a sixth and separate affirmative defense, upon information and belief, the Complaint and each purported claim alleged therein fails to state facts upon which relief can be granted against Alcan Rhenalu, for at least the reasons set forth in the Motion to Dismiss, which was denied without prejudice to renew at the conclusion of discovery.

PRAYER FOR RELIEF

Wherefore, Alcan Rhenalu prays for the following relief:

- A. The entry of judgment dismissing the Complaint with prejudice;
- B. The entry of a judgment declaring that Alcan Rhenalu has neither infringed, nor actively induced infringement of, any valid and enforceable claim of the '639 patent;
- C. The entry of a judgment declaring that the claims of the '639 patent, and each of them, are invalid for failing to meet one or more of the conditions for patentability set forth at 35 U.S.C. §§101 et seq.;
- D. The entry of a judgment declaring that the '639 patent is unenforceable;
- E. The entry of a judgment declaring this an exceptional case under Title 35, United States Code Section 285, and awarding Alcan Rhenalu its reasonable attorneys fees;
- F. An award of costs and interest to be assessed against Alcoa; and
- G. Such other and further relief as the Court may deem just and proper.

JURY DEMAND

Alcan Rhenalu demands a jury trial on all issues triable to a jury in this matter.

ASHBY & GEDDES

/s/ John G. Day

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